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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,642	12/08/2003	Darrel J. Van Buer	GP-303047	3016
7590	08/12/2005		EXAMINER	
KATHRYN A MARRA General Motors Corporation Legal Staff, Mail Code 482-C23-B21 P.O. Box 300 Detroit, MI 48265-3000			NGUYEN, CUONG H	
			ART UNIT	PAPER NUMBER
			3661	
			DATE MAILED: 08/12/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/730,642	VAN BUER ET AL.
	Examiner	Art Unit
	CUONG H. NGUYEN	3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 24 May 2005.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-22 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-22 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 08 December 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____

Status of the claims

1. This Office Action is the answer to the amendment received on 5/24/05. Claims 1-22 are currently pending.

Drawing

2. This application has been filed with 4 sheets of formal drawings, and they are accepted for examinations.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-22 are rejected under 35 U.S.C. § 103 as being unpatentable over Jones (US Pat. 6,748,318) in view of Fuchs et al. (US Pat. 6,567,745).**

A. As to independent claim 1: Jones teaches a method for predicting vehicle operator destinations, comprising:

- receiving vehicle position data (see Jones, Fig.2, ref.25);
- comparing said data for a current trip to vehicle position data for a previous trip (see Jones, col. 19 line 64 to col. 20 line 10);
- mapping a path to a destination (see Jones, col. 19 line 58 to col. 20 line 10).

Jones does not disclose that pattern-recognition technology is used for predicting a vehicle destination.

However, Fuchs et al. apply that technology in a global positioning environment (see Fuchs et al., col. 3 lines 5-12).

It would have been obvious with one ordinary skill in the art at the time of invention to implement Jones with pattern-recognition technology for predicting a vehicle destination taught by Fuch for the benefit of making a decision based on the past habits of drivers because using this technique would give a high accuracy and improve automatic controls of a vehicle.

B. As to dependent claim 7: Jones teaches that position data includes navigation coordinates (see Jones, Fig.14 ref. 604).

C. As to independent claim 8: Jones teaches said navigation coordinates are GPS coordinates (see Jones, Fig.14 ref. 604).

D. As to claim 9: Jones teaches that vehicle position data includes a time stamp, a date stamp and navigation coordinates (see Jones, Fig.14 ref. 601, 18:30-31).

E. As to claim 10: Jones teaches that vehicle position data include a vehicle heading/direction, and a vehicle speed (please note that a vehicle's speed is derived knowing distance & time traveled - see Jones, col. 22 lines 35-43, col. 32 lines 13-22, and col. 34 lines 38-52).

F. As to claim 11: Jones teaches that communicating to an operator of said vehicle responsive to said suggesting/route planning (inherently in Jones, Fig.3 ref.75).

G. As to claim 12: Jones teaches that communicating is responsive to vehicle data (see Jones, Fig.2 ref. 12).

H. As to claim 13: Jones teaches that communicating is further responsive to environment data (i.e., traffic jam/adverse weather problems, see Jones 2:9-22).

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I. As to claim 14: Jones teaches that communicating to a telematic service (see Jones, Fig.2 ref. 25).

J. As to claim 15: Jones teaches that telematic service is one or more of navigation, traffic, and weather .et. (see Jones, Fig.2 ref. 25).

K. As to claim 16: Jones teaches that receiving occurs once during each time interval (see Jones, Fig.14 ref. 605).

L. As to claim 18: Jones teaches a vehicle is an automobile (see Jones, Fig.1 ref. 19).

M. As to independent claims 19, 22: Jones teaches a system for predicting vehicle operator destinations, comprising:

- a navigation device (see Jones, Fig.1 ref. 25);

a storage device (see Jones, Fig.1 ref. 14 “BASE STATION CONTROL UNIT”);

- a microprocessor in communication with said navigation device and said storage device (see Jones, Fig.1 ref. 10), said microprocessor including instructions to implement the method comprising:

- receiving vehicle position data for a vehicle via said navigation device (see Jones, Fig.3 ref. 70);

- comparing said vehicle position data for a current trip to vehicle position data for a previous trip to predict a destination for said vehicle (this portion is similar AS CLAIM 1(b)‘S LIMITATION; therefore, similar rationales and reference set forth are applied), said vehicle position data for a previous trip stored in said storage device (see Jones, Fig.1 ref. 14 “BASE STATION CONTROL UNIT”); and

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- suggesting a path to said destination (this limitation is similar as a limitation of claim 1c).

Jones does not disclose that pattern-recognition technology is used for predicting a vehicle destination.

However, Fuchs et al. apply that technology in a global positioning environment (see Fuchs et al., 3:5-12).

N. As to claim 20: Jones teaches a navigation device is a GPS receiver (see Jones, Fig.14 ref. 604).

O. As to claims 2, 5: Jones does not disclose that pattern recognition technology is used for predicting a vehicle destination/driver's behavior.

However, it is obvious that a comparison includes performing event categorization and pattern recognition (i.e., weekday trip vs. weekend trip; stopping at 7-11 for coffee in weekday vs. stopping at church for masses in weekend).

Jones does not disclose that pattern-recognition technology is used for predicting a vehicle destination.

However, Fuchs et al. apply that technology in a global positioning environment (see Fuchs et al., 3:5-12).

P. As to claim 3: Jones does not expressly identifying transitions between a being stop and being running condition of a vehicle.

However, it is old and well-known to detect a vehicle condition with the GPS by duration it stops/"NOT MOVING" and being underway/"BEING RUNNING"; therefore, one can know this "MOVING/STOPPING" condition by seeing if vehicle coordinates

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change in a predetermined time (e.g., it is reasonable to determine “MOVING/STOPPING” conditions with database tables of Jones’Fig.14 – it is obvious to use this database for knowing if a vehicle is “MOVING/STOPPING”).

Q. As to claim 4: Jones does not expressly disclose a pattern recognition technique by combining data of a current trip and a previous trip.

However, it is reasonable to have those information from Jones’Fig.14 for comparison since Jones uses this database for records.

R. As to claim 6: The rationales and reference for an obviousness rejection because claim 6 contains similar limitations of claims 3 & 4 (i.e., a previous trip includes a starting time and location, an ending time and location, and route data including previous position data (see Jones, Fig.14).

S. As to claim 17: The examiner submits that it is obvious to receiving a vehicle position data in response to said vehicle moving a pre-selected distance (see Jones, Fig.16).

T. As to claim 21: The examiner submits that it is old to build a storage device located within a microprocessor (e.g., a microprocessor can has its own built-in memory – by integration of available electronic devices).

Response

4. The addition of pattern recognition technology in navigation in independent claims are obvious because previous computer data (whether they are voice or text data) are compared to come up with updated data – here merely DATA are used for inputs (only in different fields). Therefore, the examiner respectfully disagrees about the arguments on page 6, 2nd paragraph.

Conclusion

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5. Claims 1-22 are not patentable. The amendment necessitates a new ground of rejections (changing rejection grounds from 35 USC 102 to 35 USC 103(a)). Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Related prior art:

- O'Neal, (US Pat. 4,359,733) teaches about comparing position data of a vehicle, where the position data just calculated is compared with position data that was previously calculated for the same aircraft and stored at a number of reserved locations in the identified memory data block; the results of this comparison are used to obtain the speed, and true course of the vehicle based on the time elapsed between successive position calculations.

- Additional cited references in attached form PTO-892 suggests the claimed limitation of using pattern recognition for predictions in navigation.

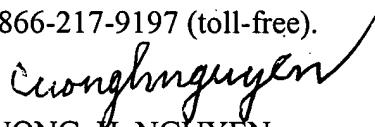
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CUONG H. NGUYEN whose telephone number is 571-272-

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6759. The examiner can normally be reached on 7:30 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THOMAS G. BLACK can be reached on 571-272-6956. The fax phone number for the organization where this application is assigned is 703-305-7687.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


CUONG H. NGUYEN
Primary Examiner
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